AMENDMENTS TO THE CLAIMS:

Please amend Claims 13, 16, 19 and 22 and add new Claims -25-32 as follows. This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

Claims 1-12 (Canceled).

13. (Currently Amended) A method of heat treatment for a Ni-base alloy tube, in which the tube is maintained at a temperature of 650 to 1200°C for 1 to 1200 minutes in a continuous heat treatment furnace, characterized in that:

at least two gas supplying devices for supplying an atmospheric gas consisting of hydrogen or a mixed gas of hydrogen and argon, whose dew point is in a range from -60°C to +20°C, are provided on the outlet side of the continuous heat treatment furnace, so that they can move in the tube moving direction;

prior to putting the tube into the continuous heat treatment furnace, the atmospheric gas is supplied into the tube from the front end of the tube moving direction by use of one of the gas supplying devices and a gas introducing pipe, which is arranged inside of the continuous heat treatment furnace;

the tube is put into the continuous heat treatment furnace while being supplied with the atmospheric gas;

after the front end of the tube reaches the outlet side of the continuous heat treatment furnace, the supply of the atmospheric gas from the one gas supplying device is switched to the supply from the other gas supplying device~~; and~~

~~the operations are repeated~~.

14. (Previously Presented) A method of heat treatment according to Claim 1, characterized by maintaining the Ni-base alloy tube at a temperature of 650 to 750°C for 300 to 1200 minutes, after the heat treatment of maintaining the tube at a temperature of 650 to 1200°C for 1 to 1200 minutes.

15. (Previously Presented) A method of heat treatment according to Claim 1, characterized in that the Ni-base alloy tube to be heat-treated is a cold-worked tube.

16. (Currently Amended) A method of heat treatment for a Ni-base alloy tube consisting of, by mass %, C: 0.01 to 0.15%, Mn: 0.1 to 1.0%, Cr: 10 to 40%, Fe: 5 to 15% and Ti: 0 to 0.5%, and the balance Ni and impurities, in which the tube is maintained at a temperature of 650 to 1200°C for 1 to 1200 minutes in a continuous heat treatment furnace, characterized in that:

at least two gas supplying devices for supplying an atmospheric gas consisting of hydrogen or a mixed gas of hydrogen and argon, whose dew point is in a range from -60°C to +20°C, are provided on the outlet side of the continuous heat treatment furnace, so that they can move in the tube moving direction;

prior to putting the tube into the continuous heat treatment furnace, the atmospheric gas is supplied into the tube from the front end of the tube moving direction by use of one of the gas supplying devices and a gas introducing pipe, which is arranged inside of the continuous heat treatment furnace;

the tube is put into the continuous heat treatment furnace while being supplied with the atmospheric gas;

after the front end of the tube reaches the outlet side of the continuous heat treatment furnace, the supply of the atmospheric gas from the one gas supplying device is switched to the supply from the other gas supplying device~~; and~~

~~the operations are repeated~~.

17. (Previously Presented) A method of heat treatment according to Claim 4, characterized by maintaining the Ni-base alloy tube at a temperature of 650 to 750°C for 300 to 1200 minutes, after the heat treatment of maintaining the tube at a temperature of 650 to 1200°C for 1 to 1200 minutes.

18. (Previously Presented) A method of heat treatment according to Claim 4, characterized in that the Ni-base alloy tube to be heat-treated is a cold-worked tube.

19. (Currently Amended) A method of heat treatment for a Ni-base alloy tube, in which the tube is maintained at a temperature of 650 to 1200°C for 1 to 1200 minutes in a continuous heat treatment furnace, characterized in that:

at least one gas supplying device for supplying an atmospheric gas, which consists of hydrogen or a mixed gas of hydrogen and argon, and whose dew point is in a range from -60°C to +20°C, is respectively provided on the inlet side and the outlet side of the continuous heat treatment furnace, so that they can move in the tube moving direction;

prior to putting the tube into the continuous heat treatment furnace, the atmospheric gas is supplied into the tube from the front end of the tube moving direction by use of the gas supplying device provided on the inlet side of the continuous heat treatment furnace and a gas introducing pipe, which is longer than the tube and is arranged inside of the continuous heat treatment furnace;

the tube is put into the continuous heat treatment furnace while supplying the atmospheric.gas;

after the front end of the tube reaches the outlet side of the continuous heat treatment furnace, the supply of the atmospheric gas from the gas supplying device, provided on the inlet side of the continuous heat treatment furnace, is switched to the supply from the gas supplying device, provided on the outlet side of the continuous heat treatment furnace~~; and~~

~~the operations are repeated~~.

20. (Previously Presented) A method of heat treatment according to Claim 7, characterized by maintaining the Ni-base alloy tube at a temperature of 650 to 750°C for 300 to 1200 minutes, after the heat treatment of maintaining the tube at a temperature of 650 to 1200°C for 1 to 1200 minutes.

21. (Previously Presented) A method of heat treatment according to Claim 7, characterized in that the Ni-base alloy tube to be heat-treated is a cold-worked tube.

22. (Currently Amended) A method of heat treatment for a Ni-base alloy tube consisting of, by mass %, C: 0.01 to 0.15%, Mn: 0.1 to 1.0%, Cr: 10 to 40%, Fe: 5 to 15% and Ti: 0 to 0.5%, and the balance Ni and impurities, in which the tube is maintained at a temperature of 650 to 1200°C for 1 to 1200 minutes in a continuous heat treatment furnace, characterized in that:

at least one gas supplying device for supplying an atmospheric gas, which consists of hydrogen or a mixed gas of hydrogen and argon, and whose dew point is in a range from -60°C to +20°C, is respectively provided on the inlet side and the outlet side of the continuous heat treatment furnace, so that they can move in the tube moving direction;

prior to putting the tube into the continuous heat treatment furnace, the atmospheric gas is supplied into the tube from the front end of the tube moving direction by use of the gas supplying device provided on the inlet side of the continuous heat treatment furnace and a gas introducing pipe, which is longer than the tube and is arranged inside of the continuous heat treatment furnace;

the tube is put into the continuous heat treatment furnace while supplying the atmospheric gas;

after the front end of the tube reaches the outlet side of the continuous heat treatment furnace, the supply of the atmospheric gas from the gas supplying device, provided on the inlet side of the continuous heat treatment furnace, is switched to the supply from the gas supplying device, provided on the outlet side of the continuous heat treatment furnace~~; and~~

~~the operations are repeated~~.

23. (Previously Presented) A method of heat treatment according to Claim 10, characterized by maintaining the Ni-base alloy tube at a temperature of 650 to 750°C for 300 to 1200 minutes, after the heat treatment of maintaining the tube at a temperature of 650 to 1200°C for 1 to 1200 minutes.

24. (Previously Presented) A method of heat treatment according to Claim 10, characterized in that the Ni-base alloy tube to be heat-treated is a cold-worked tube.

25. (New) A method of heat treatment according to claim 1, wherein the method is repeated using another Ni-base alloy tube.

26. (New) A method of heat treatment according to claim 4, wherein the method is repeated using another Ni-base alloy tube.

27. (New) A method of heat treatment according to claim 7, wherein the method is repeated using another Ni-base alloy tube.

28. (New) A method of heat treatment according to claim 10, wherein the method is repeated using another Ni-base alloy tube.

29. (New) A method of heat treatment according to claim 1, wherein the Ni-base alloy tube is part of a group of tubes undergoing the same heat treatment and the heat treatment is repeated on a second group of Ni-base alloy tubes.

30. (New) A method of heat treatment according to claim 4, wherein the Ni-base alloy tube is part of a group of tubes undergoing the same heat treatment and the heat treatment is repeated on a second group of Ni-base alloy tubes.

31. (New) A method of heat treatment according to claim 7, wherein the Ni-base alloy tube is part of a group of tubes undergoing the same heat treatment and the heat treatment is repeated on a second group of Ni-base alloy tubes.

32. (New) A method of heat treatment according to claim 10, wherein the Ni-base alloy tube is part of a group of tubes undergoing the same heat treatment and the heat treatment is repeated on a second group of Ni-base alloy tubes.